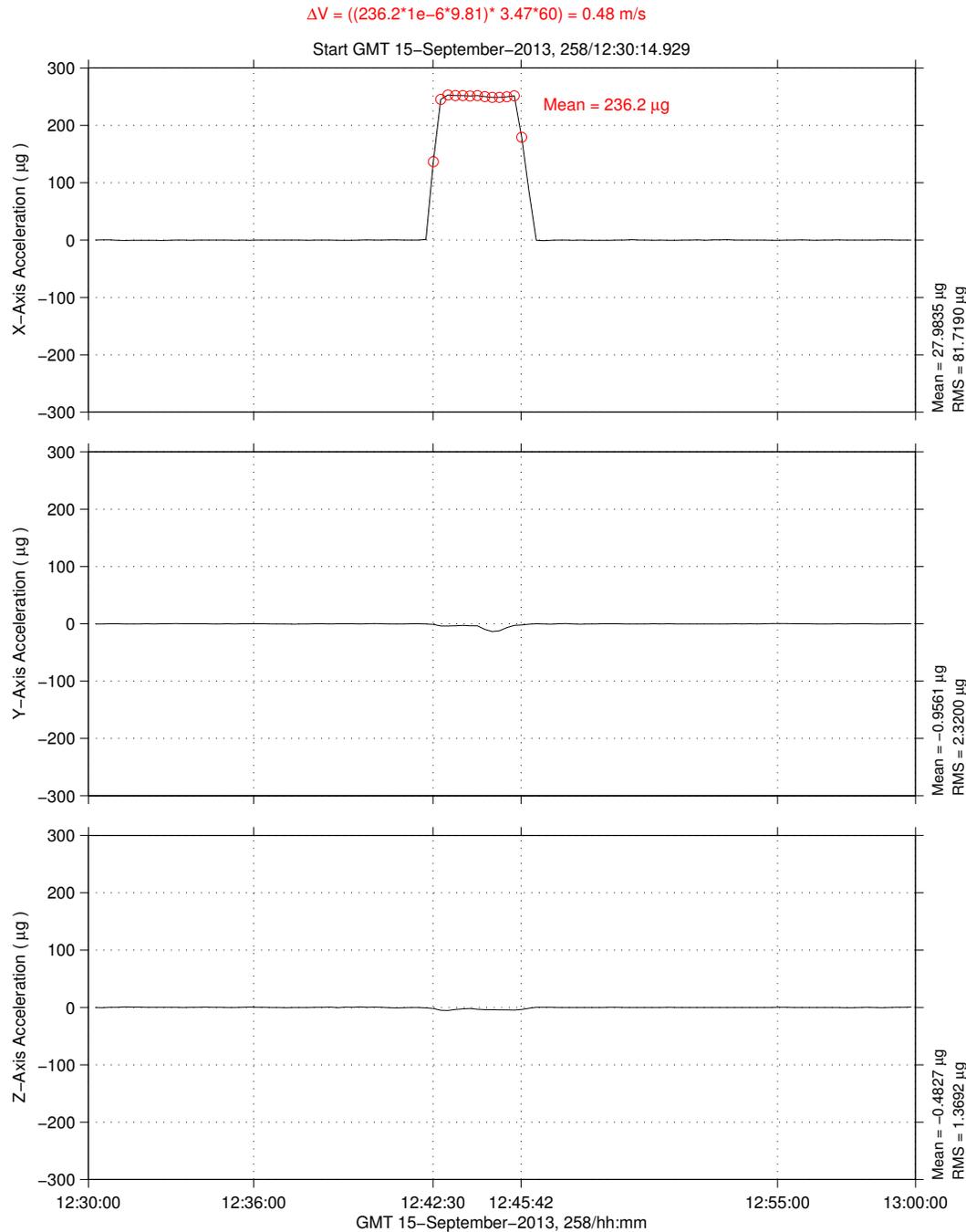


## ATV-4 Reboost Quantify



Description	
Sensor	MAMS, OSSBTMF 0.0625 sa/sec (0.01 Hz)
Location	LAB1O2, ER1, Lockers 3,4
Plot Type	Acceleration versus time

### Notes:

- The as-flown time line shows that the ATV-4 vehicle fired its thrusters to reboost the station with time of ignition (TIG) on GMT 15-Sep-2013 at 12:42 and a duration of about 3½ minutes. MAMS data shows TIG closer to 12:42:30 and a duration 3 minutes and 12 seconds.
- The average X-axis acceleration measured by MAMS during the reboost thruster firing was 236  $\mu\text{g}$ .
- Note no significant offset on the Z-axis, and relatively minor perturbations observed on the Y-axis during the reboost event.

Regime:	Quasi-Steady
Category:	Vehicle
Source:	ATV-4 Reboost



## **ATV-4 (Albert Einstein) Reboost and Docked Operations - Ancillary Information**

As of GMT 12-July-2013, all dry cargo had been unloaded from Albert Einstein, allowing the ATV to be filled with waste for removal from the station. Transfer of fuel and oxidizer from the ATV to the Russian segment of the ISS took place on GMT 01-August-2013. The operation took approximately 1½ hours, and pipelines were then purged to avoid complications when the Albert Einstein cargo vehicle undocks from the ISS. The fuel transferred allows the ISS to adjust its orbit when there are no docked vehicles, so it can perform reboosts on its own.

